

a2
conced stabilisation below 1×10^{-7} (Frequency noise/Absolute frequency) and the optical feedback is
in the range of 0.1% to 10% of the light output of the laser.

Bb
cat. (Amended) An optical apparatus or interferometric displacement
determination device as claimed in claim 1 wherein the apparatus or the device includes an
optical fibre element.

REMARKS

Claims 1 - 9 are pending. By this Preliminary Amendment, the specification
and claims are amended. In the specification, the word "frequency" has been crossed through
by mistake. This occurred during the photocopying process at the International Bureau and is
on the original copy of the published document. The specification is amended to remove the
error. Prompt and favorable examination on the merits is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R.
1.121(c)(1)(ii)).

Respectfully submitted,

Thomas J. Pardini
James A. Oliff
Registration No. 27,075

Thomas J. Pardini
Registration No. 30,411

JAO:TJP/mlb
Attached: Appendix
Date: January 25, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461

APPENDIX

Page 1, line 32 to page 2, line 4:

Back-reflection is undesirable in the devices mentioned above and in all devices which require a specific ~~frequency~~frequency of laser light, because excessive back- reflection interacts with the laser to change the polarisation and output frequency of the laser light.

Various HeNe lasers suffer from sensitivity to back- reflection.

Changes to Claims:

The following are marked-up versions of the amended claims:

5. (Amended) An interferometric displacement determination device as claimed in claim 3 ~~or claim 4~~ wherein the HeNe gas ratio is about 80:20 to about 90:10 respectively.
6. (Amended) An optical apparatus or interferometric displacement determination device as claimed in claim 1 ~~any one of the preceding claims~~ wherein the laser achieves a frequency stabilisation below 1×10^{-7} (Frequency noise/Absolute frequency) and the optical feedback is in the range of 0.1% to 10% of the light output of the laser.
7. (Amended) An optical apparatus or interferometric displacement determination device as claimed in claim 1 ~~any one of the preceding claims~~ wherein the apparatus or the device includes an optical fibre element.